**SYNOPSIS**

**Report on**

**Automation of the Pathology**

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**ABSTRACT**

The main aim of this project is to develop a website that facilitates the user with an on-the-click functionality which is useful to find a patient’s lab report. Users can get lab reports at any time through this website. The aim of this application is to reduce the manual effort and time needed to travel and collect the report of a test from the laboratory and this software will be helpful for the administrator also for the maintenance of the patient’s history.

However, the patient will provide the test sample at the laboratory collection centre and will pay the relevant fee. The support staff will provide the receipt.

A significant part of the operation of any Pathology Lab involves the acquisition, management and timely retrieval of great volumes of information. This information typically involves patient personal information and medical history, staff information, room and ward scheduling, staff scheduling, operating theatre scheduling and various facilities waiting lists.

All of this information must be managed in an efficient and cost wise fashion so that an institution's resources may be effectively utilized system will automate the management of the pathology lab making it more efficient and error free. It aims at standardizing data, consolidating data ensuring data integrity and reducing inconsistencies.

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**INTRODUCTION**

A significant part of the operation of any Pathology Lab involves the acquisition, management and timely retrieval of great volumes of information. This information typically involves; patient personal information and medical history, staff information, staff scheduling and various facilities waiting lists. All of this information must be managed in an efficient and cost wise fashion so that an institution's resources may be effectively utilized this project will automate the management of the Pathology Lab making it more efficient and error free. It aims at standardizing data, consolidating data ensuring data integrity and reducing inconsistencies.

**Existing System**

Pathology Labs currently use a manual system for the management and maintenance of critical information. The current system requires numerous paper forms, with data stores spread throughout the pathology lab management infrastructure. Often information (on forms) is incomplete, or does not follow management standards. Forms are often lost in transit between departments requiring a comprehensive auditing process to ensure that no vital information is lost. Multiple copies of the same information exist in the Pathology Lab and may lead to inconsistencies in data in various data stores.

**Proposed System**

The proposed system is designed for Any Pathology Lab to replace their existing manual, paper based system. The new system is to control the following information; patient information, staff and patient invoices. These services are to be provided in an efficient, cost effective manner, with the goal of reducing the time and resources currently required for such tasks.

**Highlights:**

* Saves your time
* Manage the entire process in easy and quick way
* Enhance the patients
* Improve the maintain standards

**Project Objective**

The proposed system is automated that is faster than the existing manually maintained system and can handle data easily. Computerized of the details of manually maintained lab test operations. The system allow administrator to control all the activities hence identifying the deficiency in the patient and accessibility to lab tester. Accurate information can be generated easily and quickly at different levels. Report can be generating easily and quickly.

**Modules Description**

In the software there are generally two kinds of users:

* Admin
* Patient

1. **ADMIN**

* The lab owner basically is the admin of the system.
* Once the admin logins, they’ll be able to manage the registered patient’s details.
* They update the patient details about their tests and reports, and also updates the schedule for test samples.
* Admin will be able to generate the Patient test report and the bill for the tests done.
* The admin maintains all the patients test history.

1. **PATIENT**

* Patient first register/login to the website, after he/she will be able to book a test sample pickup appointment.
* Patient can check their reports of their tests. And also able to view their previous tests history.
* Patient can check the bill amount for their tests.

**Project Outcome**

The final output of this project is that we will be able to communicate to patient to confirm the date for the sample collection, the lab assistant can generate the report easily with the help of this interface and when admin want to give the report to patient then admin can easily send report to patient’s given contact detail.

**Conclusion**

The package was designed in such a way that future modifications can be done easily. The following conclusion can be deduced from the development of the project.

* Automation of the entire system improves the efficiency
* It provides a friendly graphical user interface which proves to be better when compared to the existing system.
* It gives appropriate access to the authorized users depending on their permissions.
* It effectively overcomes the delay in communications.
* Updating of information becomes so easier. System security, data security and reliability are the striking features.

**Proposed Time Duration**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **WEEK**  **1** | **WEEK**  **2** | **WEEK 3** | **WEEK 4** | **WEEK 5** | **WEEK 6** | **WEEK 7** | **WEEK 8** | **WEEK 9** | **WEEK 10** | **WEEK 11** | **WEEK 12** |
| ***Requirement analysis and feasibility check*** |  |  |  |  |  |  |  |  |  |  |  |  |
| ***Designing*** |  |  |  |  |  |  |  |  |  |  |  |  |
| ***Coding*** |  |  |  |  |  |  |  |  |  |  |  |  |
| ***Testing and maintenance*** |  |  |  |  |  |  |  |  |  |  |  |  |

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